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(54) Title: **NETWORK MANAGEMENT SYSTEM**

(57) **Abstract:** The present invention discloses a method of managing a network, especially an optical network, including a plurality of nodes which are interconnected in an arbitrary topology so as to be capable of carrying traffic between selected nodes, comprising the steps of providing a supervisory network by means of supervisory channels between the node; providing a node manager which is comprised of one or more software modules in each node; establishing of supervisory connections over one or more supervisory channels between selected nodes through which the node manager communicates with other node manager in other nodes; providing a node module in each node manager that provides an interface to the hardware settings of the respective node; providing a master module in at least one node manager; establishing of supervisory connections over one or more supervisory channels between selected nodes through which the master module communicates with the node modules; amending and/or monitoring of hardware settings in selected nodes with respective node module of the node; controlling of the amendments carried out by the node modules and/or processing of the monitored hardware settings by the master module.

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